

PRODUCT
BRIEF



Intel Express 3D Graphics Card

Optimized for the Intel Pentium® II Processor

Experience the Vision of Enhanced Graphics

The Intel Express 3D graphics card, combined with next-generation Pentium® II processor-based systems, delivers exceptional and compelling 3D performance. Mainstream PC users can enjoy outstanding 3D and 2D graphics and full-motion video—capabilities once reserved for high-end systems costing tens of thousands of dollars.

Stunning 3D. The Intel Express 3D graphics card's uncompromising 3D image quality consistently delivers lifelike visual experiences in 3D applications. Native driver support for Windows® 95 (Direct3D®), Windows 98 (Direct3D) and Windows NT 4.0 (OpenGL®) allows more software applications to benefit from its advanced features. The flexible performance of the Intel Express 3D graphics card allows users to run demanding office, CAD and creativity applications all on the same Pentium II processor-based system.



The Intel Express 3D graphics card is based on the recently developed Intel®740 graphics accelerator, which delivers state-of-the-art hardware acceleration to the PC. Powered by this advanced graphics engine, the Intel Express 3D graphics card delivers stunning image quality, while maintaining high performance—even when multiple 3D hardware acceleration features are used simultaneously.

Advanced Architecture. In order to enhance the graphics capabilities of the PC, Intel led the development of the Accelerated Graphics Port (AGP), which has received widespread industry acceptance. AGP provides a high-speed data path with up to 528 MB/sec of throughput between the graphics card, the CPU and system memory. AGP also allows the graphics card to store textures in system memory, enabling much more detailed and realistic 3D graphics (For details, see the image on the back side of this sheet). The Intel Express 3D graphics card—designed to take full advantage of the latest AGP features—works with the Intel Pentium II processor to create a data super-highway for 3D graphics and full-motion video.

In anticipation of the next generation of visual computing, Intel's Express 3D graphics card prepares PCs for both today's and tomorrow's visually enhanced software.

Features

Benefits

Pentium® II processor support	Graphics card optimized for the most advanced Intel processor family
Intel®740 Graphics Accelerator	Latest generation graphics accelerator delivers high-performance 3D, 2D and video
HyperPipelined 3D	Parallel Data Processing (PDP) for sustained performance; Precise-Pixel Interpolation (PPI) for visual integrity and Direct Memory Execution (DME) for scalability and a flexible design
Accelerated Graphics Port (AGP) 2X	Advanced, high-speed graphics pipeline for compelling 3D graphics and video
Drivers written and tested by Intel	Confidence that development and compatibility testing were performed by a world-class company
Bundled software applications	Users can experience the card's advanced features with the included productivity and entertainment software titles
Five-year limited warranty	Expanded investment protection

Intel Express 3D Graphics Card

System Requirements

Processor	An Intel Pentium® II processor is recommended for optimal performance
Motherboard	Based on the Intel 440LX AGPset or a later generation AGPset, motherboard must have an unpopulated AGP slot
Operating System	Windows® 95 OSR 2.1 or later (with USB Supplement), Windows 98, or Windows NT 4.0 SP3 or later. (This document was published prior to the final release of Windows 98. Check the Intel Web site for information on the latest drivers.)
Peripherals	A CD-ROM drive to install software and drivers
Monitor	A standard VGA or SVGA compatible monitor with a 15-pin VGA connector

Mechanical Description

Form Factor	Half-length ATX form factor AGP connector
Card Size	17.2 cm x 8.25 cm (excluding bracket)
Local Memory	2 MB or 4 MB SGRAM

Accelerated Graphics Port (AGP) v1.0 Support

Memory	Direct Memory Execution allows texture data to be stored in system memory
Bus	Pipelining and sideband addressing
Transfer Mode	AGP 2X transfer mode for data throughput rates of up to 528 MB/sec

Intel740 Graphics Accelerator

Acceleration	3D, 2D and full-motion video
3D Features	Z-buffering, anti-aliasing, fogging, perspective correction, Gouraud shading, alpha blending, per-pixel bilinear filtering and specular highlighting

Supported Display Modes

	Resolution	Colors	Refresh Rate
2D	640 x 480	16.7M, 65K, 256, 16	60-85
	800 x 600	16.7M, 65K, 256	56-85
	1,024 x 768	16.7M [†] , 65K, 256	60-85
	1,280 x 1,024	65K [†] , 256	60-75
	1,600 x 1,200 [†]	256 [†]	60-75
3D	640 x 480	65K	60-85
	800 x 600 [†]	65K [†]	60-85

[†] Requires 4 MB version



This virtual landscape is an actual 3D screen image taken from an Intel Express 3D graphics card with 4 MB local SGRAM. The image shown represents approximately 25 MB of texture data, made possible by the Direct Memory Execution features of the Intel Express 3D graphics card.

Environment

Ambient Temperature 0°C to 55°C

Storage Temperature -40°C to 75°C

EMC and Safety

EMC Compliance	FCC Part 15 Declaration of Conformity authorization as a Class B peripheral device EMC Directive 89/336/EEC, including EN 55022 Class B and EN 50082-1 C-Tick Class B Declaration (Australia) UL Recognized to UL1950, Third Edition Complies with IEC950/EN60950
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Product Contents

- Intel Express 3D graphics card with 2 MB or 4 MB SGRAM
- CD-ROM with drivers, user's manual, warranty and bundled software

Bundled Software Includes⁽¹⁾: Criterion Redline Racer®, Gravity Terra®, Zoran SoftPEG®, Cosmo Software HomeSpace Designer® and Player® 2.0, Intervista WorldChart® and WorldView® 2.1, Viewpoint LiveArt 98®, and Microsoft Internet Explorer 4.0®
- Quick reference guide

⁽¹⁾ Bundled software titles and revisions subject to change. Refer to <http://www.intel.com/> and link to Intel Express 3D Graphics Card for the most current list of bundled software.

For the most current product information, visit Intel's Web site at:
<http://channel.intel.com/business/ibp/kit.htm>



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The Intel Express 3D graphics card may contain design defects or errors known as errata, which may cause the product to deviate from published specifications. Current characterized errata are available on request.

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